

Work Order ID 67154

Wednesday, March 09, 2011 12:50:47 PM



Page 1

Item ID: D206-642-341

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Skidtube

Start Date: 3/9/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 3/18/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Handwritten initials

Date: 11-03-9

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D2650

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100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile and create labels per PPP D206-642-341 CHG003

Handwritten signature

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Start Date: 3/9/2011 Start Qty: 1.00



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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

110

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Deburr Fwd edge of tube

2-Remove ridge on inside of Fwd edge of tube as per Dwg D2650

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

A/R ☐ Aluminum Rod ☒ M116577/M111385

4-Grind weld flush to cap on top surface only.

5-Cut aft end to length as per dwg D2650

6-Drill pilot holes using drill jig DT8168A (A,& B) and DT8025. Open to Ø0.312"

7-Drill holes for wearplates using DT 8028-5. Open to Ø 0.297".

8-Open Aft Cap Hole using #6 Drill Bit

9-Open holes for Tow Ring to Ø0.625" as per Dwg D2650, D2650-5 Drilling Detail

10-Remove inner indexing ridge on aft end of skidtubes as per Dwg D2650

11-Deburr and Blow out all chips from inside the tube

> DP 11-4-6

> BE 4/10/07

BE 4/10/08

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Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

115

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

S. May 1/25



120

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing



11-4-8

125

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

1 of 2 BE 1/10/08

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Reference:

Cust Item ID:

Customer:

Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130



Skidtubes

Skidtubes

Skidtubes

Memo

0.00

1-Open holes to finished size as per Dwg D2650, D2650-5 Drilling Detail
(without cutting fluid)

2-Countersink crossbolt spacer holes as per Dwg D2650(without cutting fluid)

3-Deburr. Blow out chips. Grind alodine off around crossbolt spacer.

4-Bond D2654-5 web in place as per QSI 015Ensure holes line up Allow 12 Hrs.
cure time before cutting

Start Date: 11-4-8 Time: 3:10

Finish Date: Time:

A/R Sikaflex-291 11-6-9-8

Sikaflex expiry date: 12-1-15

140



QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

11-4-8

1 0 BE 11/04/11

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Cust Item ID:

Required Date: 3/18/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 Skidtubes	Skidtubes	0.00							
Skidtubes	Memo 1-Prep per QSI 005 and Insert cross bolt spacers D2649. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod A/R <input type="checkbox"/> Aluminum Rod <input checked="" type="checkbox"/> <i>M111385</i> <i>BE 11/04/13</i> 2-Grind welds flush as per Dwg D2650. Masking Tape access to inside of the Skidtube 3-Counterbore 5/16" x 0.750" deep as per Dwg D2650 Debur 4- Install nut plate as per dwg	0.00							
170 QC	QC10- Inspect visual per QSI004- ground welds	0.00							
Quality Control	Memo <i>Silvaylis</i>	0.00							

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2. Once the problem is identified, the next step is to define the objectives and goals of the project. This helps to clarify what needs to be achieved and provides a clear direction for the team.

3. The third step is to develop a plan or strategy to address the problem. This involves breaking down the problem into smaller, manageable tasks and determining the resources needed to complete each task.

4. The fourth step is to implement the plan. This involves putting the strategy into action and monitoring progress regularly to ensure that the project is on track.

5. The final step is to evaluate the results of the project. This involves assessing the outcomes against the objectives and goals and identifying any areas for improvement.

Wednesday, March 09, 2011 12:50:48 PM

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1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

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Customer:

11-11-11

Abstract

Abstract

**Insp.
Stamp**

00000000000000000000

0.00

0.00

1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

0.00

Brush alodine tube on crossbolt spacer area, do not acid etch, do not dip tube in tank.

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0.00

START TIME: 8:45
OVEN TEMPERATURE: 320°
FINISH TIME: 9:15

0.00

0.00

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID 67154

Wednesday, March 09, 2011 12:50:48 PM



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Revision ID:

Stop



Item Name: Replacement Skidtube

Start Date: 3/9/2011 **Start Qty:** 1.00

**Cust Item ID:**

Required Date: 3/18/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation Description

Set Up/ Run Hours

Tool ID

Tool #**Plan
Code**

Accept	Qty
--------	-----

Reject
Qty

Reject Number

**Insp.
Stamp**

210

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

1 0 11 104 2

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Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

220

0.00



HandFinishing

HandFinish

Memo

0.00

Hand Finishing

1-Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate.

A/R ☐ Sikaflex-291 ☒ 11/16/10

Sikaflex expiry date: ☐ 12/01

2-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install plugs as per Dwg D2650. Clean excess adhesive

3-Install MS27039-4-06 Screw as per DEO 9153

4-Inspect for foreign object per QSI 024

5-Install D2646 Aft Cap and seal with SikaflexClean excess adhesive

A/R ☐ Sikaflex-291 ☒ 11/16/10

Sikaflex expiry date: ☐ 12/01

6-Wing Walk as per Dwg D2650-5 and QSI 005 4.4

Batch: 11117315

1 0 22 11/16/10

W/O:		WORK ORDER CHANGES					
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Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

260

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/5/11

ME
11-05-11

W/O:		WORK ORDER CHANGES					
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Picklist Print

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Page 1

Work Order ID: 67154

Parent Item: D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 3/9/2011

Required Date: 3/18/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev: H05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM
IPP Rev: I 08-09-29 revF as per dwg DD verified by: EC Est Rev: J 09-03-02 as per DS19440 rev.a DD verified by: EC IPP rev K 10.08.03 chg ms27039-1-08 for "C" type EC verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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AN960JD416 NAS1149D0463J Purchased

No

Each

30.0000

1



Washer

Location

Loc Qty

Loc Code

ST300

24

113288

24

ST356

6

115622

6

M116805

46

CCR264SS3-3

Purchased

No

Each

332.0000

2



Cherry Rivet

Location

Loc Qty

Loc Code

ST311

332

112314

4

113539

44

113973

88

117086

196

2

BEH/04/14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Page 2

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Parent Item: D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 3/9/2011

Required Date: 3/18/2011

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-03

Purchased

No

Each

1,837.000

2



Cherry Rivet



BE 11/09/14

Location

Loc Qty

Loc Code

MEZZ

1837

110139

2

110153

35

111359

5

112314

2

114436

448

114450

31

114859

1314

2

D2620

Manufactured

No

Each

15.0000

1



Skidtube, 206 Skidtube



Location

Loc Qty

Loc Code

LG

15

62684

6

64784

9

1

11-4-6

D2647

Manufactured

No

Each

51.0000

1



Cap



Location

Loc Qty

Loc Code

FP

51

55352

51

BE 11/09/07

Wednesday, March 09, 2011 12:50:53 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Wednesday, March 09, 2011 12:50:53 PM

Page 3

Work Order ID: 67154



Parent Item: D206-642-341



Parent Item Name: Replacement Skidtube

Start Date: 3/9/2011

Required Date: 3/18/2011

Start Qty: 1.00

Required Qty: 1.00

D2649 Manufactured No

Each 120.0000 19



Cross Bolt Spacer

Location

Loc Qty

Loc Code

LG	120
58545	2
60652	4
61496	2
62889	11
63359	3
65317	98



BE 11/04/13
B 68224 1/19

D2654-5 Manufactured No

Each 2.0000 1



Web

Location

Loc Qty

Loc Code

LG	2
64878	2



① DP 11-4-8
BE 11/01/14

D2680-041 Manufactured No

Each 14.0000 1



Nut Plate

Location

Loc Qty

Loc Code

ST020	14
55366	14



1

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Wednesday, March 09, 2011 12:50:53 PM

Page 4

Work Order ID: 67154

Parent Item: D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 3/9/2011

Required Date: 3/18/2011

Start Qty: 1.00

Required Qty: 1.00

MS27039C1-08

Purchased

No

Each

959.0000

56



SCREW



56
JL 11/04/21

Location

Loc Qty

Loc Code

FP

63

115336

63

ST293

896

115589

347

116022

148

116373

400

19185

1

220

Each

759.0000

54

54

ALS4-1032-130

Purchased

No



Insert



54
JL 11/04/21

Location

Loc Qty

Loc Code

PKG11

624

114723

42

116864

582

ST282

96

110511

10

115911

86

ST381

39

114654

39

220

Each

61.0000

54

54

AN960C10L

NAS1149C0332

Purchased

No



washer



54
JL 11/04/21

Location

Loc Qty

Loc Code

ST297

61

107534

59

108246

2

M117291

X54

Wednesday, March 09, 2011 12:50:53 PM

Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
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Work Order ID: 67154

Parent Item: D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 3/9/2011

Required Date: 3/18/2011

Start Qty: 1.00

Required Qty: 1.00

AN960JD10L NAS1149D0332J Purchased No

220 Each

4.0000 2 2



Washer



31 11/04/21

Location

Loc Qty

Loc Code

ST335

4

X1 117291

42

11912

4

D2646 Manufactured No

220 Each

71.0000 1 1



Aft Cap



31 11/04/21

Location

Loc Qty

Loc Code

FP-4

1

57332

1

FP6

16

52663

3

62678

12

63633

1

X1

Return 2010

54

62678

54

D2651-1 Manufactured No

220 Each

511.0000 14 14



Plug



31 11/04/21

Location

Loc Qty

Loc Code

FP

189

51530

152

62638

37

fpa

322

53349

205

57869

117

X14

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Work Order ID: 67154

Parent Item: D206-642-341



Parent Item Name: Replacement Skidtube

Start Date: 3/9/2011



Required Date: 3/18/2011

Start Qty: 1.00



Required Qty: 1.00

D2651-3	Manufactured	No	220	Each	404.0000	14	14
							<u>HL 1404/21</u>
O-Ring							



<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP	404	
46114	12	
<u>61962</u>	392	

D3535-11	Manufactured	No	220	Each	7.0000	1	1
							<u>HL 1404/21</u>
Wearshoe							

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP019	7	
57261	1	
<u>63626</u>	6	

D3535-23	Manufactured	No	220	Each	18.0000	1	1
							<u>HL 1404/21</u>
Wearshoe							

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP021	18	
63571	4	
<u>66236</u>	13	

D3535-35	Manufactured	No	220	Each	12.0000	1	1
							<u>HL 1404/21</u>
Wearshoe							

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
FP018	12	
<u>65926</u>	12	

W/O:		WORK ORDER CHANGES						
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Page 7

Wednesday, March 09, 2011 12:50:53 PM

Work Order ID: 67154

Parent Item: D206-642-341

Parent Item Name: Replacement Skidtube

Start Date: 3/9/2011

Required Date: 3/18/2011

Start Qty: 1.00

Required Qty: 1.00

D3536-11

Manufactured No

220 Each

19.0000

1

1



Gasket



u104/26

LocationLoc QtyLoc Code

FP011

15

57867

3

65574

12

ST497A

4

46715

4

D3536-23

Manufactured No

220 Each

36.0000

1

1



Gasket



u104/26

LocationLoc QtyLoc Code

FP011

26

63570

1

66560

25

ST

10

66240

10

D3536-35

Manufactured No

220 Each

16.0000

1

1



Gasket



u104/26

LocationLoc QtyLoc Code

FP012

16

58683

1

63579

1

65573

2

66237

12

Wednesday, March 09, 2011 12:50:53 PM

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Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Wednesday, March 09, 2011 12:50:53 PM

Work Order ID: 67154

Parent Item: D206-642-341



Parent Item Name: Replacement Skidtube

Start Date: 3/9/2011



Required Date: 3/18/2011

Start Qty: 1.00



Required Qty: 1.00

D3537-1 Manufactured No 220 Each 29.0000 6 6

 Wearpad  all 11/04/26

Location	Loc Qty	Loc Code
FP017	29	1366935
37749	6	
65057	23	

D3537-3 Manufactured No 220 Each 26.0000 1 1

 Wearpad  all 11/04/26

Location	Loc Qty	Loc Code
FP17	26	
65929	26	

MS27039-4-06 Purchased No 220 Each 91.0000 1 1

 Screw  all 11/04/26

Location	Loc Qty	Loc Code
ST292	91	
109061	4	
115460	87	

W/O:		WORK ORDER CHANGES					
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

QTY -1	QTY -3	QTY -5	QTY -7	PART NUMBER	DESCRIPTION
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
17	18	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

F

SHAW COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 67154

11-03-9

RELEASED
08-07-23

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A
- 8) WELD PER DART QSI 004
- 9) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 10) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 11) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 12) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 13) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

F	DRAWING UPDATED TO CURRENT STANDARDS, SHT 6 ADDED. ALL SECTION AND DETAIL VIEWS TRANSFERRED TO SHT 6. SHT 1 IN PL PART D2649 QTY UPDATED. SHT 6 SECT C-C GRIND INSTRUCTIONS DELETED FROM NOTE 7 (SEE NCR 239).	AJS	08.08.08
E	REMOVE CBORE, CHG DRILL, ADD CHAMFER	CP	06.03.30
D	REDRAW; INCCRP. DE09136/9153/9163 MOD GROUND HANDLING ON D2650-1/-3	CP	04.05.17
C	CHANGE HOLE PATTERN AND FRONT END	DS	97.10.29
B	AS MANUFACTURED CHANGES	DS	97.06.26
A	NEW ISSUE	DS	97.03.25
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 1 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
DATE	08.08.08	COPYRIGHT © 1997 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

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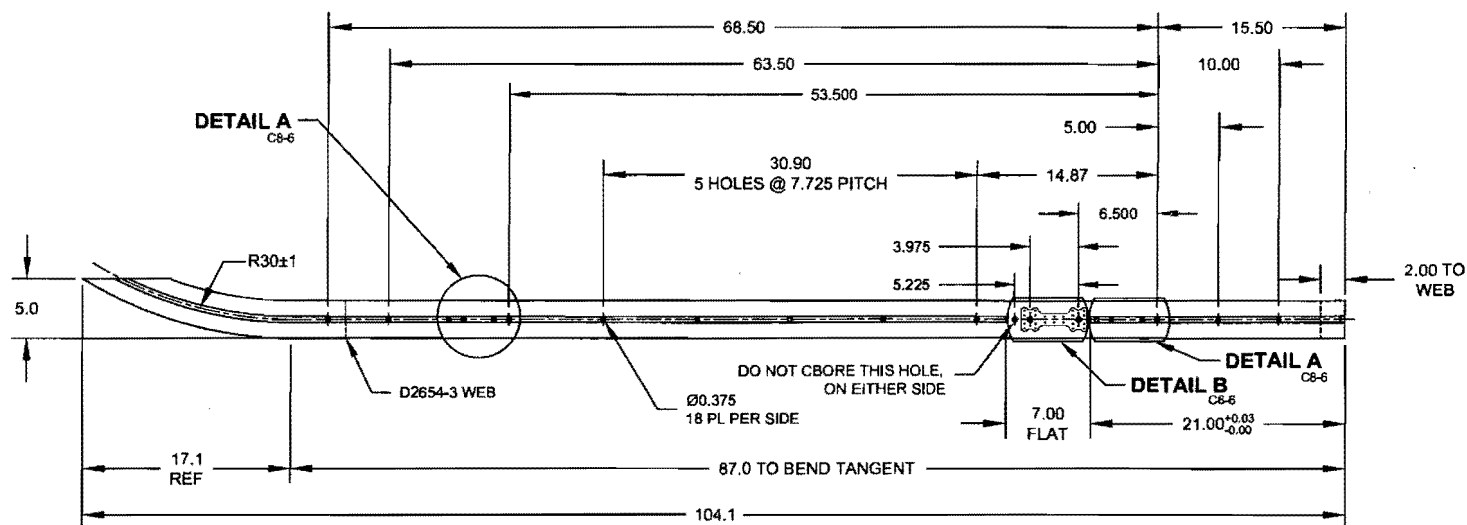
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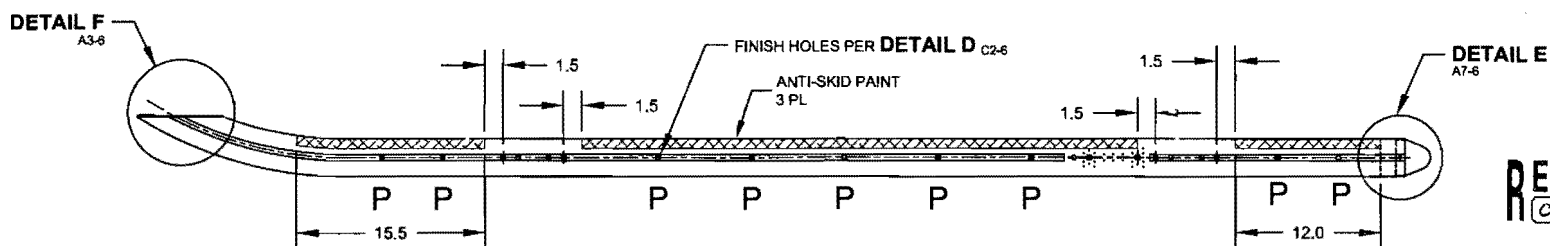
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D2650-3 BENDING/DRILLING DETAIL



D2650-3 ASSEMBLY/FINISHING DETAIL

u/o 67154

RELEASED
08 07 22 118

DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 3 OF 6
APPROVED		TITLE	SCALE
DE APPR.		206/407 SKIDTUBE ASSEMBLIES	NTS
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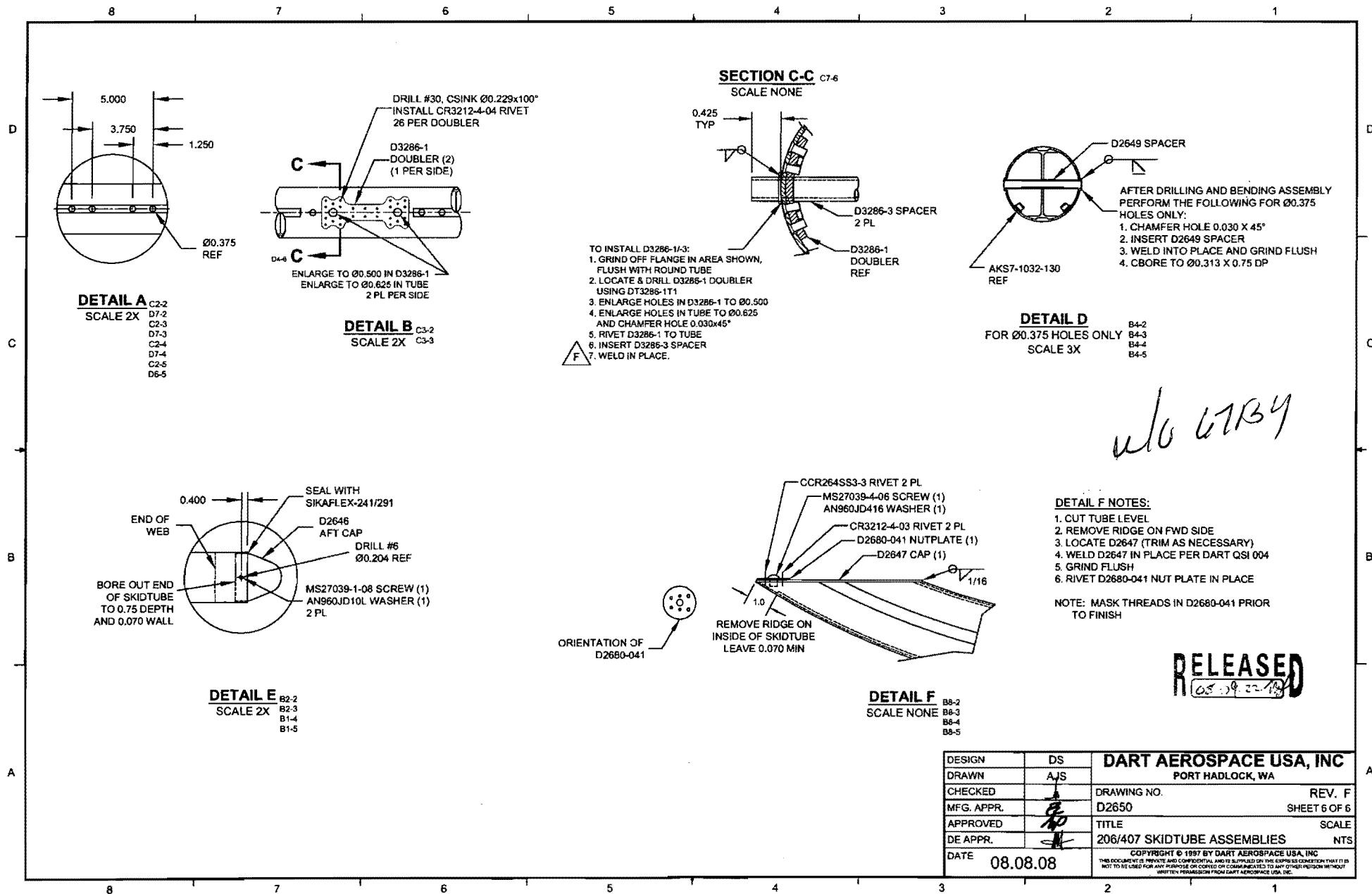
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SECTION C-C C7-6
SCALE NONE

- TO INSTALL D3286-1/3:
1. GRIND OFF FLANGE IN AREA SHOWN, FLUSH WITH ROUND TUBE
 2. LOCATE & DRILL D3286-1 DOUBLER USING DT3286-1T1
 3. ENLARGE HOLES IN D3286-1 TO Ø0.500
 4. ENLARGE HOLES IN TUBE TO Ø0.625 AND CHAMFER HOLE 0.030X45°
 5. RIVET D3286-1 TO TUBE
 6. INSERT D3286-3 SPACER
 7. WELD IN PLACE.



DETAIL D
FOR Ø0.375 HOLES ONLY
SCALE 3X

DETAIL F NOTES:

1. CUT TUBE LEVEL
2. REMOVE RIDGE ON FWD SIDE
3. LOCATE D2647 (TRIM AS NECESSARY)
4. WELD D2647 IN PLACE PER DART QSI 004
5. GRIND FLUSH
6. RIVET D2680-041 NUT PLATE IN PLACE

NOTE: MASK THREADS IN D2680-041 PRIOR TO FINISH

RELEASED
05-09-2018

DESIGN	DS	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2650	SHEET 6 OF 6
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NOTE: Date & initial all entries

NO. 246

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barkley Elliott
Job number: 66462
Part number: D206-642-441
Description: 206 skirt tube
Welding Process: Tig[☒] Mig[]
Base material: aluminum
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Pat Lums Date of Test Coupon 11-03-09

Welder Barkley Elliott Date of Test Coupon 11-03-09

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

